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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,484	01/21/2004	Gregory R. Zimmer	024445-110	9807

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EXAMINER

HAMILTON, ISAAC N

ART UNIT PAPER NUMBER

3724

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,484

Applicant(s)

ZIMMER, GREGORY R.

Examiner

Isaac N. Hamilton

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 31-37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 and 31-37 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-10, 31-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kammerling-Essmann (4,829,854) in view of Zimmer et al (5,537,905), hereafter Zimmer. Kammerling-Essmann discloses a shank portion in the figure as the two parallel shank side surfaces on the rule 1; V-shaped cutting edge portion and surfaces 2; cutting edge 3; intermediate portion and surfaces are juxtaposed cutting edge portion 2 and the shank portion as shown in the figure; thickness is from about 0.178 to 2.13 mm in column 1, line 53; cutting edge portion has a hardness between about 480 to 720 HV in column 2, lines 1-4; shank portion inherently has a hardness between about 280 and 450 HV because in order to achieve a cutting edge portion hardness between 480 to 720 HV, the rule must be produced from a flat material of spring material as disclosed in column 1, lines 50-55; the cutting edge portion surfaces are shaved as recited in column 1, lines 9-22 and lines 51-60; cutting portion has ground surfaces in column 2, lines 5-6; the shank portion inherently has a lower hardness at a surface of the shank portion than at a center of the shank portion due to the spring steel being drawn in a hard metal draw die as recited in column 1, lines 7-8. Kammerling-Essmann discloses the claimed invention except for the cutting edge portion is bendable to 150 degrees at a radius of 0.35 mm. It would have been obvious to one of ordinary skill in the art to provide the elements mentioned above for the

Art Unit: 3724

purpose of maximizing cutting efficiency for different materials, such as, plastic, paper, rubber, wood, cardboard, and metal. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Such a modification would have involved a characteristic of a component. A change in bendability is generally recognized as being within the level of ordinary skill in the art.

Kammerling-Essmann also does not disclose a plurality of notches. However, Zimmer teaches a plurality of notches 8. It would have been obvious to provide a plurality of notches 8 in Kammerling-Essmann as taught by Zimmer in order to reduce the amount of pressure required to push the rule into a workpiece.

3. Claims 8 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kammerling-Essmann and Zimmer, and further in view of Reijnders (6,464,121). Kammerling-Essmann and Zimmer disclose everything as noted above, but do not disclose distances between at least two pairs of succeeding notches are different. Reijnders teaches distances between at least two pairs of succeeding notches are different in figure 7. It would have been obvious to provide distances between at least two pairs of succeeding notches that are different in the combination as taught by Reijnders in order to avoid cutting elements on the surface area of the workpiece.

4. Claims 1-7, 9-10, 31-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer et al (5,537,905), hereafter Zimmer, in view of Kammerling-Essmann. Zimmer discloses shank portion 2; shank side surfaces 3a, 3b; thickness of shank portion is juxtaposed side surfaces 3a, 3b; V-shaped cutting edge portion surfaces 5a, 5b; cutting edge 6; notches 8; intermediate portion/intermediate portion surfaces 10a, 10b; shaved and ground surfaces in

Art Unit: 3724

column 4, lines 37-46; shank portion has a lower hardness at a surface than at the center in column 4, lines 48-54.

Zimmer discloses the claimed invention except for the thickness of the shank portion is from 0.178 to 2.13 mm, the hardness is between 280 and 450 HV, the cutting edge hardness is between 480 to 720 HV, the shank portion has a thickness of 0.71 mm and a hardness of 380 HV, the cutting edge portion has a hardness of 640 HV and is bendable to 150 degrees at a radius of 0.35 mm, the shank portion has a thickness of 1.05 mm, the shank portion has a thickness between 1.42 and 2.13 mm. It would have been obvious to one of ordinary skill in the art to provide the elements mentioned above for the purpose of maximizing cutting efficiency for different materials, such as, plastic, paper, rubber, wood, cardboard, and metal. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Such a modification would have involved a mere change in the size or characteristic of a component. A change in size, bendability and hardness is generally recognized as being within the level of ordinary skill in the art.

Zimmer also does not disclose that at least one of the two cutting edge portion surfaces is shaved. However, Kammerling-Essmann teaches that at least one of the two cutting edge portion surfaces is shaved in column 1, lines 50-60. It would have been obvious to provide Zimmer with at least one of the two cutting edge portion surfaces shaved as taught by Kammerling-Essmann in order to increase the dimensional stability of the rule.

5. Claims 8 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Zimmer and Kammerling-Essmann, and further in view of Reijnders (6,464,121).

Art Unit: 3724

The combination discloses everything as noted above, but does not disclose distances between at least two pairs of succeeding notches are different. Reijnders teaches distances between at least two pairs of succeeding notches are different in figure 7. It would have been obvious to provide distances between at least two pairs of succeeding notches that are different in the combination as taught by Reijnders in order to avoid cutting elements on the surface area of the workpiece.

Response to Arguments

6. Applicant's arguments with respect to claims 1-10 and 31-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3724

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac Hamilton whose telephone number is 571-272-4509. The examiner can normally be reached on Monday through Friday between 8am and 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

l/A

IH

November 21, 2005

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Timothy V. Eley
Primary Examiner